



## DEPARTMENT OF ENERGY

### Notice of Request for Information (RFI) on Risks in the High-Capacity Batteries, including Electric Vehicle Batteries Supply Chain

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy (DOE).

**ACTION:** Request for information (RFI).

**SUMMARY:** On February 24, 2021, President Biden issued an Executive order directing several Federal agency actions to secure and strengthen America's supply chains. One of these directions is for the Secretary of Energy to submit, within 100 days, a report to the President identifying risks in the high-capacity batteries, including electric-vehicle batteries, supply chain and policy recommendations to address these risks. The U.S. Department of Energy (DOE or Department) invites public comment on its Request for Information (RFI) number DE-FOA-0002502 regarding the Risks in the High-Capacity Batteries, including Electric Vehicle Batteries Supply Chain.

**DATES:** Responses to the RFI must be received by **April 14, 2021**.

**ADDRESSES:** Interested parties are to submit comments electronically to [VTO@ee.doe.gov](mailto:VTO@ee.doe.gov). Include "High-Capacity Batteries Supply Chain RFI" in the subject line of the email. Responses must be provided as attachments to an email. Only electronic responses will be accepted. The complete RFI document is located at <https://eere-exchange.energy.gov/>.

**FOR FURTHER INFORMATION CONTACT:** Questions may be addressed to [VTO@ee.doe.gov](mailto:VTO@ee.doe.gov) or to Samuel Gillard at 202-287-5849.

### SUPPLEMENTARY INFORMATION:

#### Background:

On February 24, 2021, President Biden issued Executive Order 14017, “America’s Supply Chains” (86 FR 11849). E.O. 14017 focuses on the need for resilient, diverse, and secure supply chains to ensure U.S. economic prosperity and national security. Such supply chains are needed to address conditions that can reduce critical manufacturing capacity and the availability and integrity of critical goods, products, and services. In relevant part, E.O. 14017 directs that within 100 days, the Secretary shall submit a report to the President, through the Assistant to the President for National Security Affairs (APNSA) and the Assistant to the President for Economic Policy (APEP), identifying the risks in the supply chain for high-capacity batteries, including electric vehicle batteries, and policy recommendations to address these risks.

**Written Comments:**

The Department is particularly interested in information directed to the policy objectives listed in E.O. 14017 as they affect the supply chain for high-capacity batteries, including electric vehicle batteries, including but not limited to the following elements:

- (i) Critical materials including battery grade nickel, cobalt and lithium, underlying the supply chain for high-capacity batteries, including electric vehicle batteries;
- (ii) Manufacturing and other capabilities necessary to produce high-capacity batteries, including extraction of raw materials, refining, production of advanced cathode and anode powders, separators, electrolytes, current collectors and advanced recycling technologies for high-capacity batteries;
- (iii) The availability of the key skill sets and personnel necessary to sustain a competitive U.S. high-capacity batteries ecosystem, including the domestic education and manufacturing workforce skills needed for high-capacity battery manufacturing; the skills gaps therein, and any opportunities to meet future workforce needs;

(iv) Risks or contingencies that may disrupt the high-capacity batteries supply chain (including defense, intelligence, cyber, homeland security, health, climate, environmental, natural, market, economic, geopolitical, human-rights or forced labor risks):

(a) Risks resulting from lack of or failure to develop domestic manufacturing capabilities, including emerging capabilities;

(v) The resilience and capacity of the high-capacity battery supply chain to support national and economic security and emergency preparedness, including:

(a) Manufacturing, recycling, or other needed capacities (including ability to modernize to meet future needs);

(b) Gaps in manufacturing capabilities, including nonexistent, threatened, or single-point-of-failure capabilities, or single or dual suppliers;

(c) Location of key manufacturing and production assets, and risks posed by these assets' physical location;

(d) Exclusive or dominant supply of critical or essential goods and materials by or through nations that are, or may become, unfriendly or unstable;

(e) Availability of substitutes or alternative sources for critical or essential goods and materials;

(f) Need for research and development capacity to sustain leadership in the development of goods and materials critical or essential to high-capacity battery manufacturing;

(g) Current domestic education and manufacturing workforce skills and any identified gaps, opportunities and potential best practices;

(h) Role of transportation systems in supporting the high-capacity battery supply chain and risks associated with these transportation systems;

(i) Risks posed by climate change to the availability, production, or transportation of goods and materials critical to high-capacity manufacturing

(vi) Potential impact of the failure to sustain or develop elements of the high-capacity supply chain in the United States on other key downstream capabilities. Also, the potential impact of

purchases of high-capacity batteries products by downstream customers, including volume and price, product generation and alternate inputs.

(vii) Policy recommendations or suggested executive, legislative, regulatory changes, or actions to ensure a resilient supply chain for high-capacity batteries (e.g., reshoring, nearshoring, or developing domestic suppliers, cooperation with allies to identify or develop alternative supply chains, building redundancy into supply chains, ways to address risks due to vulnerabilities in digital products or climate change).

(viii) Any additional comments relevant to the assessment of the high-capacity batteries manufacturing and advanced packing supply chains required by E.O. 14017.

DOE encourages commenters, when addressing the elements above, to structure their comments using the same text as identifiers for the areas of inquiry to which their comments respond to assist DOE in more easily reviewing and summarizing the comments received in response to these specific comment areas. For example, a commenter submitting comments responsive to (i) critical and essential goods and materials underlying the high-capacity battery supply chain, would use that same text as a heading in the public comment followed by the commenter's specific comments in this area. The RFI (DE-FOA-0002502) is available at: <https://eere-exchange.energy.gov/>.

**CONFIDENTIAL BUSINESS INFORMATION:** Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: one copy of the document marked “confidential” including all the information believed to be confidential, and one copy of the document marked “non-confidential” with the information believed to be confidential deleted. Submit these documents via email. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

**Signing Authority:** This document of the Department of Energy was signed on March 23, 2021, by David Howell, Acting Director, Vehicle Technologies Office, Office of Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on March 23, 2021.

**Treena V. Garrett,**

*Federal Register Liaison Officer,*

*U.S. Department of Energy.*